



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,935	02/02/2004	Denny Jaeger	NBOR-014	1612
30139	7590	12/23/2010	EXAMINER	
WILSON & HAM			SELLERS, DANIEL R	
1811 Santa Rita Road				
Suite 130			ART UNIT	PAPER NUMBER
Pleasanton, CA 94566			2614	
			MAIL DATE	DELIVERY MODE
			12/23/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/770,935	JAEGER, DENNY
	Examiner	Art Unit
	DANIEL R. SELLERS	2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 27 September 2010.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-6,9,10,12-24,27,28 and 30-43 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-6,9,10,12-24,27,28 and 30-43 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 04 August 2008 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-6, 9, 10, 12-14, 27, 28, and 30-40 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. **Claims 1-6, 9, 10, 12-24, 27, 28, and 30-40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Drews et al. (previously cited and hereinafter Drews), US 5,768,607 A, in view of Baumgartner et al. (previously cited and hereinafter Baumgartner), US 5,642,171 A, and Bullwinkel et al. (hereinafter Bullwinkel), US 6,099,317 A.

4. Regarding **claim 1**, Drews teaches a method for synchronizing operations in a computer environment with accompanying audio (see column 3, line 15 - column 4, line 2), said method comprising:

replaying said operations and said accompanying audio in said computer environment said operations resulting from processing of recorded user inputs... (see column 5, lines 37-57, and column 7, line 12 - column 8, line 52);

creating a synchronization point at a common point in said replaying of said operations and said accompanying audio (see column 13, lines 30-36);

associating said synchronization point with said accompanying audio, said synchronization point providing a reference point to substantially synchronize said

accompanying audio when said operations are replayed in a replay computer environment using said recorded user inputs (see column 13, lines 30-36);

detecting said synchronization point during a subsequent replay of said operations and said accompanying audio in said replay computer environment, said subsequent replay involving another processing of said recorded user inputs (see column 14, lines 4-26);

comparing said synchronization point with a time value associated with said another processing of said recorded user inputs (see column 14, lines 4-48);

...

Drews teaches a method, wherein operations with accompanying audio is synchronized in a computer environment. However, Drews does not teach pausing accompanying audio if the operations (i.e. recorded user inputs) fall behind the synchronization, so that they video can catch up to the audio portion of the recording. Therefore Drews does not teach these features:

replaying said operations and said accompanying audio in said computer environment using an event recording, said operations resulting from processing of recorded user inputs, **said event recording including all user inputs to an original computer environment during said event recording and initial conditions of said original computer environment when said event recording was initiated;**

...;
...;
...;
...;

selectively pausing said subsequent replay of said accompanying audio if a difference between said synchronization point and said time value exceeds a predefined amount so that said subsequent replay of said operations can catch up to said accompanying audio; and

resuming said subsequent replay of said accompanying audio if a difference between said synchronization point and a current time value does not exceed a second predefined amount, said current time value being associated with said another processing of said recorded user inputs

Baumgartner teaches a method of synchronizing audio and video streams in a computer environment (see abstract). Specifically, Baumgartner teaches an environment, wherein the processing capabilities of the system are too slow (see column 5, lines 18-27). It is not hard for one of ordinary skill in the art at the time of the invention to appreciate that a video processor may have

the same deficiencies. Baumgartner teaches pausing the audio if the audio is too far ahead of the video playback (see column 7, lines 16-23). Specifically, Baumgartner teaches the selectively pausing and resuming steps (see figure 5A, steps 518, 520, 522, and 524 and column 14, lines 1-26). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Drews and Baumgartner for the purpose of synchronizing audio and video (i.e. recorded user input) on slower computer hardware. However, the combination does not appear to teach:

replaying said operations and said accompanying audio in said computer environment using an event recording, said operations resulting from processing of recorded user inputs, said event recording including all user inputs to an original computer environment during said event recording and initial conditions of said original computer environment when said event recording was initiated;

Bullwinkel teaches a system for computer-based training (CBT) (see Bullwinkel, column 2, lines 11-26). Bullwinkel teaches recording all user inputs are during an event recording, or session (see Bullwinkel, column 1, lines 33-38, column 6, line 55 – column 7, line 11, and column 12, lines 5-18). Furthermore, Bullwinkel teaches that the “Application Player/Recorder” (APR) is initialized and a start state is recorded (see Bullwinkel, column 7, lines 5-11, column 12, lines 19-35, figure 5, step 802, and figure 10, step 302). One of ordinary skill in the art at the time of the invention would have found it obvious that the APR program uses a start state, so that the program to be taught to a user of the CBT system would be in the correct state. It would have been obvious for one of ordinary skill in

the art at the time of the invention to combine the teachings of Drews, Baumgartner, and Bullwinkel for the purpose of providing consistent results in a session recording playback.

5. Regarding **claim 2**, the further limitation of claim 1, see the preceding rejection with respect to claim 1. The combination teaches the method of claim 1, wherein

creating of said synchronization point includes creating said synchronization point in response to a user command (see Drews, column 13, lines 30-36, wherein a user recording sound and cursor movement causes the creation of synchronization points).

6. Regarding **claim 3**, the further limitation of claim 1, see the preceding rejection with respect to claim 1. The combination teaches the method of claim 1, wherein

said common point is at a point in time where there is no audio output during said replaying of said accompanying audio (see Drews, column 13, lines 37-45 and figure 11a, wherein common points are created at the beginning of recording, when there is no sound).

7. Regarding **claim 4**, the further limitation of claim 1, see the preceding rejection with respect to claim 1. The combination teaches the method of claim 1, further comprising

obtaining a current time value associated with said processing of said recorded user inputs, said current time value corresponding to said synchronization point (see Baumgartner, figures 5a and 5b and column 13, lines 23-67, wherein the current time value is implied to be a current audio or video time index).

8. Regarding **claim 5**, the further limitation of claim 1, see the preceding rejection with respect to claim 1. In the combination, Baumgartner teaches

different ways of storing the video and the audio (see column 10, lines 30-39).

Baumgartner does not appear to teach a method of claim 1, wherein the synchronization point is saved in the first file with the recorded audio, but it would have been obvious for one of ordinary skill in the art at the time of the invention to place the synchronization points in either file, or a single file with interleaved data. It would have been an obvious design choice.

9. Regarding **claim 6**, the further limitation of claim 1, see the preceding rejection with respect to claim 1. The combination teaches the features of claim 1, and makes these features obvious. In the combination, Drews teaches the editing of the user commands, or drawings, and editing of the recorded sound (see column 10, lines 30-40). It is inferred by the editing, or appending, of the recording will change a time value of the synchronization points. Drews teaches a timeline (see figure 11a, 11b, and 12). It would have been obvious for one of ordinary skill in the art at the time of the invention to allow direct editing of the timeline by moving a positional marker on the timeline as is known in video editing.

10. Regarding **claim 9**, the further limitation of claim 1, see the preceding rejection with respect to claim 1. The combination teaches the method of claim 1, wherein

said second predefined amount equals said predefined amount (see Baumgartner, column 14, lines 1-26 teaches one embodiment, wherein the predefined amounts are different).

In the combination, Baumgartner teaches a preferred embodiment, wherein it is obvious to change the predetermined amounts according to different applications. It would have been obvious for one of ordinary skill in the art at the time of the invention to use the same predefined amounts or thresholds to pause or resume the audio in order to make the comparison of the current time value with the synchronized playback value easier.

11. Regarding **claim 10**, see the preceding rejection with respect to claim 1. The combination teaches the method of claim 1, which reads on the method of claim 10.

12. Regarding **claim 12**, the further limitation of claim 10, see the preceding rejection with respect to claim 9. The combination makes obvious the method of claim 10 with these additional features.

13. Regarding **claim 13**, the further limitation of claim 10, see the preceding rejection with respect to claim 6. The combination makes obvious the method of claim 10 with these additional features.

14. Regarding **claim 14**, the further limitation of claim 10, see the preceding rejection with respect to claim 1. The combination teaches the features of claim 10 and these additional features.

15. Regarding **claim 15**, the further limitation of claim 14, see the preceding rejection with respect to claim 2. The combination teaches the features of claim 14 and these additional features.

16. Regarding **claim 16**, the further limitation of claim 14, see the preceding rejection with respect to claim 3. The combination teaches the features of claim 14 and these additional features.

17. Regarding **claim 17**, the further limitation of claim 14, see the preceding rejection with respect to claim 5. The combination teaches the features of claim 14 and these additional features.

18. Regarding **claim 18**, the further limitation of claim 14, see the preceding rejection with respect to claim 6. The combination makes obvious the method of claim 14 with these additional features.

19. Regarding **claim 19**, see the preceding rejection with respect to claim 1. The combination teaches the method of claim 1, which reads on the storage medium readable by a computer, tangibly embodying a program of instructions executable by said computer to perform method steps for synchronizing operations in a computer environment with accompanying audio, said method comprising the features of claim 1.

20. Regarding **claim 20**, the further limitation of claim 19, see the preceding rejection with respect to claim 2. The combination teaches the features of claim 2, which reads on the features of claim 20.

21. Regarding **claim 21**, the further limitation of claim 19, see the preceding rejection with respect to claim 3. The combination teaches the features of claim 3, which reads on the features of claim 21.

22. Regarding **claim 22**, the further limitation of claim 19, see the preceding rejection with respect to claim 4. The combination teaches the features of claim 4, which reads on the features of claim 22.

23. Regarding **claim 23**, the further limitation of claim 19, see the preceding rejection with respect to claim 5. The combination teaches the features of claim 4, which reads on the features of claim 23.

24. Regarding **claim 24**, the further limitation of claim 19, see the preceding rejection with respect to claim 6. The combination makes obvious the method of claim 19 with these additional features.

25. Regarding **claim 27**, the further limitation of claim 19, see the preceding rejection with respect to claim 9. The combination teaches the features of claim 4, which reads on the features of claim 27.

26. Regarding **claim 28**, see the preceding rejection with respect to claim 1. The combination teaches the method of claim 1, which reads on the storage medium readable by a computer, tangibly embodying a program of instructions executable by said computer to perform method steps for synchronizing operations in a computer environment with accompanying audio, said method comprising the features of claim 10.

27. Regarding **claim 30**, the further limitation of claim 28, see the preceding rejection with respect to claim 9. The combination makes obvious the storage medium of claim 28 with these additional features.

28. Regarding **claim 31**, the further limitation of claim 28, see the preceding rejection with respect to claim 6. The combination makes obvious the method of claim 28 with these additional features.

29. Regarding **claim 32**, the further limitation of claim 28, see the preceding rejection with respect to claim 1. The combination teaches the features of claim 28 and these additional features.

30. Regarding **claim 33**, the further limitation of claim 32, see the preceding rejection with respect to claim 2. The combination teaches the features of claim 32 and these additional features.

31. Regarding **claim 34**, the further limitation of claim 32, see the preceding rejection with respect to claim 3. The combination teaches the features of claim 32 and these additional features.

32. Regarding **claim 35**, the further limitation of claim 32, see the preceding rejection with respect to claim 5. The combination teaches the features of claim 32 and these additional features.

33. Regarding **claim 36**, the further limitation of claim 32, see the preceding rejection with respect to claim 6. The combination makes obvious the method of claim 32 with these additional features.

34. Regarding **claim 37**, see the preceding rejection with respect to claim 16.

The combination teaches a method with the combined features of claims 10, 14, and 16.

35. Regarding **claim 38**, see the preceding rejection with respect to claim 37.

The combination teaches the method of claim 16, which reads on the storage medium readable by a computer, tangibly embodying a program of instructions executable by said computer to perform method steps for synchronizing operations in a computer environment with accompanying audio, said method comprising the features of claim 37.

36. Regarding **claim 39**, see the preceding rejection with respect to claim 17.

The combination teaches a method with the combined features of claims 10, 14, and 17.

37. Regarding **claim 40**, see the preceding rejection with respect to claim 39.

The combination teaches the method of claim 17, which reads on the storage medium readable by a computer, tangibly embodying a program of instructions executable by said computer to perform method steps for synchronizing operations in a computer environment with accompanying audio, said method comprising the features of claim 39.

38. Regarding **claim 41**, see the preceding rejection with respect to claim 1.

The combination makes obvious the method of claim 1, further comprising:

saving said initial conditions of said original computer environment in a log file when a recording is initiated, said initial conditions corresponding to an initial state of said original

computer environment such that said initial state of said original computer environment can be automatically recreated on replay using said initial conditions, said initial state being a particular state from a plurality of possible states for said original computer environment, said log file including complete definitions of every control in said original computer environment with respect to said initial state so that said initial state can be subsequently recreated using said log file (see Bullwinkel, column 12, line 53 – column 14, line 30);

modifying said initial conditions in said log file in response to user editing of said log file so that a modified initial state of said original computer environment is automatically created on replay using modified initial conditions in said log file when said log file is loaded (see Bullwinkel, column 13, lines 32-65); and

automatically loading said log file in said computer environment when a replay is initiated to create said modified initial state in said computer environment as a starting state for said replay (see Bullwinkel, column 5, lines 23-35 and column 10, lines 41-58).

In the combination Bullwinkel teaches initial conditions corresponding to an initial state, wherein these teachings make obvious a log file, or the equivalent, for saving these conditions and states. Bullwinkel teaches a user editing, or appending, a FSM by adding actions corresponding to new states (see Bullwinkel, column 13, lines 32-65). Last, it is obvious to one of ordinary skill in the art at the time to automatically load the log file when the play sequence is started for the purpose of an experienced user teaching a new user how to use a new program (see Bullwinkel, column 5, lines 23-35 and column 10, lines 41-58).

39. Regarding **claim 42**, see the preceding rejection with respect to claims 10 and 41. The combination makes obvious the method of claim 10, further comprising these features (see Bullwinkel, column 5, lines 23-35, column 10, lines 41-58, and column 12, line 53 – column 14, line 30).

40. Regarding **claim 43**, see the preceding rejection with respect to claims 19 and 41. The combination makes obvious the method of claim 19, further

comprising these features (see Bullwinkel, column 5, lines 23-35, column 10, lines 41-58, and column 12, line 53 – column 14, line 30).

Conclusion

41. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Owen, US 5,585,583 A, (previously cited) teaches mixing a student's musical instrument with a synchronized audio/video playback of an instructional musical piece (abstract, column 3, line 57 - column 4, line 9, column 6, lines 43-59, column 7, lines 15-26, column 7, line 56 - column 8, line 16 and column 13, lines 48);

Kurabayashi, US 5,615,189 A, (previously cited) teaches synchronization of a word clock in MIDI circuits (abstract and column 1, line 50 - column 2, line 20);

Berstis et al., US 5,903,266 A, (previously cited) teaches audio instructions detailing various steps of connecting equipment (column 5, line 48 - column 8, line 22 and figures 3 and 4);

Falcon et al., US 6,632,094 B1, (previously cited) teaches synchronized text highlighting with audio narration for improving reading skills (abstract and column 8, lines 23-26);

Sastry et al., US 6,687,877 B1, (previously cited) teaches content annotation synchronized with user actions and recorded audio (column 5, lines 39-61);

Blume, US 6,915,103 B2, (previously cited) teaches an audio broadcast system to read an audio track corresponding to the position and speed of a handheld stylus (column 3, line 32-56 and figures 1-5);

Lilienthal, US 6,933,928 B1, (previously cited) teaches a paperless book with visual text that advances as the audio text is finished (column 3, lines 43-50);

Gaddy et al., US 7,228,189 B1, (previously cited) teaches a method for synchronizing a streaming music file with a locally captured audio input (abstract, column 7, line 39 - column 8, line 36, and figures 3a and 3b);

Estes et al., US 4,941,829 A, (previously cited) teaches a method for providing a dynamic tutorial for a computer program (see abstract);

Ricard, US 5,745,738 A, (previously cited) teaches another method for providing simulations to demonstrate the use of software (see abstract); and

Slye et al., US 5,395,242 A, teaches a method for recording a computer simulation, such as a video game simulation (see column 1, line 44 – column 2, line 7).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL R. SELLERS whose telephone

number is (571)272-7528. The examiner can normally be reached on Monday to Friday, 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel R. Sellers/
Examiner, Art Unit 2614

/VIVIAN CHIN/
Supervisory Patent Examiner, Art Unit 2614